

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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In the Matter of )  
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Revision of the Commission's )  
Rules To Ensure Compatibility )  
With Enhanced 911 Emergency )  
Calling Systems )  
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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

CC Docket No. 94-102  
RM-8143

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**REPLY COMMENTS OF AT&T WIRELESS SERVICES, INC.**

AT&T Wireless Services, Inc. ("AT&T"), by its attorneys, hereby submits its reply comments on the Further Notice of Proposed Rulemaking in the above-captioned proceeding.<sup>1/</sup> There is widespread consensus among the majority of commenters that the Commission should not impose specific requirements on wireless carriers beyond Phase II until carriers have implemented and assessed automatic location information ("ALI") technology. In particular, these parties demonstrate that proposals to require carriers to route calls to the strongest control signal, or to forward calls that do not transmit a code identification, are extremely impractical. These commenters generally agree that careful analysis of costs and benefits should be undertaken before additional requirements, including unwieldy consumer education mandates, are imposed on the wireless industry.

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<sup>1/</sup> In the Matter of Revision of the Commission's Rules To Ensure Compatibility With Enhanced 911 Emergency Calling Systems, Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 94-102, RM-8143 (rel. July 26, 1996) ("Order" or "Further Notice"). As a leading provider of wireless services, AT&T has strongly supported the development and enhancement of 911 services. See, e.g., Comments of AT&T Corp., filed Jan. 9, 1995 ("AT&T Comments"); Reply Comments of AT&T Corp., filed March 17, 1995 ("AT&T Reply Comments"); Comments of AT&T Wireless Services, Inc., filed September 25, 1996 ("AT&T FNPRM Comments").

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**I. THE COMMISSION SHOULD ALLOW CARRIERS TIME TO DEVELOP AND TEST AUTOMATIC LOCATION INFORMATION TECHNOLOGY BEFORE IMPOSING ADDITIONAL MANDATES**

The Commission proposes that covered carriers develop the means to identify and report to Public Safety Answering Points ("PSAPs") the location of any wireless 911 caller within a radius of forty feet, using longitude, latitude, and vertical location data, for ninety percent of the 911 calls processed.<sup>2/</sup> Commenters overwhelmingly agree with AT&T that the necessary technology is not available at this time to support these additional requirements.<sup>3/</sup> Many commenters also express concern that adoption of these additional requirements might actually have a "chilling effect" on the implementation of the original, 125 meter, 67 percent accuracy requirements. Bell Atlantic NYNEX Mobile, Inc. ("BANM"), for example, states that "the new proposal is only likely to frustrate and confuse the deployment of location technology. It would make no sense to invest in one form of technology to achieve one standard, when that standard may be superseded by another."<sup>4/</sup>

The Commission should therefore decline to issue specific requirements for additional location accuracy requirements to follow the initial five-year period. It is far too early to

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<sup>2/</sup> Further Notice at ¶¶ 138-39.

<sup>3/</sup> See Comments of the Personal Communications Industry Association ("PCIA"), filed Sept. 25, 1996 at 5, 8 (stating that such requirements would be "technologically premature"); see also Comments of Bell Atlantic NYNEX Mobile, Inc. ("BANM"), filed Sept. 25, 1996, at 2-3. Even the company upon whose comments the Commission apparently relied in finding such requirements "feasible," Further Notice at ¶ 139, has qualified its remarks. See Comments of KSI Inc., filed Sept. 25, 1996, at 5 (stating that KSI cannot guarantee that its current technology will provide the proposed level of accuracy 90% of the time).

<sup>4/</sup> Comments of BANM at 3. See also Comments of KSI at 6 ("Carriers may decide to do nothing unless and until they know for certain what standard/requirement they must meet and by when.").

determine whether the original requirements will be adequate or whether any additional requirements will be needed. It would be more practical to consider such improvements a few years into the development of first phase ALI technology, when AT&T and other carriers will be better positioned to evaluate ALI improvement standards.<sup>5/</sup>

## **II. THE COMMISSION SHOULD NOT IMPOSE NEW MANDATES ON CARRIERS WITHOUT ENSURING THAT BENEFITS OUTWEIGH COSTS**

AT&T agrees with the general principle that carriers should improve the accuracy of location technology,<sup>6/</sup> but cautions that such improvements should not be required at any price. The Commission must weigh the likely degree of accuracy to be obtained from any new requirements against the expected costs of achieving that degree of accuracy.<sup>7/</sup>

Commenters generally agree that the move to a more advanced location system should be

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<sup>5/</sup> Currently, AT&T is not aware of any large scale demonstration that first phase ALI exists and it will be difficult to anticipate any technological improvements until some of the location solutions have been deployed on a large scale. It is also nearly impossible to gauge the cost of the technology itself let alone the cost of improvements to this technology.

<sup>6/</sup> AT&T generally supports reporting requirements tracking ALI technology developments. See Further Notice at ¶ 143. Simplicity, however, should govern the development of such requirements. AT&T would also welcome Commission participation in industry fora that address this issue.

<sup>7/</sup> See AT&T FNPRM Comments at 3. When evaluating the reasonableness of any additional costs, the Commission should take into account the taxes and fees already imposed on wireless subscribers. In order to achieve balance between the benefits and costs of any new requirements, costs must be recoverable from all beneficiaries of wireless E-911 services, including those beyond the wireless subscriber base. 360° Communications agrees that such cost recovery mechanisms are critical "if carriers are to be able to implement what will likely be very expensive network upgrades in order to meet any new FCC requirements." See Comments of 360° Communications, filed Sept. 25, 1996, at p. 4. These cost recovery systems should be in place "prior to the implementation of any improvements in E911 capabilities" and should be competitively neutral. See also AT&T Wireless Services Inc., Petition for Reconsideration, filed Sept. 3, 1996; Reply of AT&T Wireless Services Inc., filed Oct. 23, 1996.

"driven by a demonstrable need" for such improvements, as well as "the ability and willingness of PSAPs to pay for the upgrades."<sup>8/</sup>

Commenters who support the imposition of additional ALI requirements have not demonstrated convincingly that the incremental benefits of such improvements will in any way justify the costs. Although these commenters state in a conclusory fashion that the proposal will "enhance the ability of public safety agencies to identify and respond to emergencies reported by wireless telephones,"<sup>9/</sup> they have not shown that in this era of tight budgets, states will be willing to pay the greatly increased costs that providing this minimal increase in accuracy will require.<sup>10/</sup> The suggestion of the Ad Hoc Alliance that the wireless industry repay local and state governments for the cost of any new ALI technology out of "new revenue streams accruing to the industry from commercial uses of that technology" is completely impractical.<sup>11/</sup> Such revenue streams are entirely speculative at the present time and should not be the foundation upon which new mandates are imposed.

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<sup>8/</sup> Comments of PCIA at 5. See also Comments of the American Mobile Telecommunications Association ("AMTA"), filed Sept. 25, 1996 at 1 ("Some [of the Commission's proposals] may be unachievable, at least at any rational cost to the public.").

<sup>9/</sup> Joint Comments of the Association of Public-Safety Communications Officials-International ("APCO"), the National Emergency Number Association ("NENA"), and the National Association of 911 Administrators ("NASNA"), filed Sept. 25, 1996, at 3.

<sup>10/</sup> See Comments of Associated RT Inc., filed Sept. 25, 1996, at 30, 33 (concluding that the proposed improved accuracy requirements could "increase by a factor of anywhere from 4 to 10 times" the cost of the original requirements, while adding a vertical data requirement could then double those costs) and Comments of the New Jersey Office of Emergency Telecommunications Services ("NJ OETS"), filed Sept. 25, 1996, at 3 (expressing doubt that a satisfactory funding mechanism will be available to support such a system).

<sup>11/</sup> Comments of the Ad Hoc Alliance for Public Access to 911 ("Ad Hoc Alliance"), filed September 25, 1996, at 2, 4.

In addition, the Ad Hoc Alliance fails to show that certain of its proposed requirements provide any discernible benefit at all. For example, requiring updated location information would rarely prove useful if, as one study has found, approximately 97 percent of wireless 911 calls are made by "good samaritans."<sup>12/</sup> The value of a mandated minimum latency period<sup>13/</sup> is also questionable. As RTG pointed out, while 911 calls should be transmitted as rapidly as possible, the imposition of an arbitrary five second time period will merely add to the cost of employing such a capability, without necessarily adding significantly to response time.<sup>14/</sup> At the very least, the Commission should wait until location technology is fully tested and validated before implementing such requirements.<sup>15/</sup>

### **III. THE COMMISSION SHOULD FOCUS ON REASONABLE 911 SERVICE ACCESS PROPOSALS**

#### **A. "STRONGEST SIGNAL" PROPOSALS ARE MISGUIDED**

The Commission should reject the proposal that 911 calls be sent to the cellular system with the strongest control channel signal.<sup>16/</sup> As both PCIA and BANM have established, the proposal is technically flawed for many reasons, including the lack of

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<sup>12/</sup> See Further Notice at ¶ 129 (citing Comments of SBC Communications, Inc. at 21-22); Comments of Ameritech, filed Sept. 25, 1996, at 12 (noting that locating these callers would be of little use to emergency service providers).

<sup>13/</sup> Further Notice at ¶ 142.

<sup>14/</sup> Comments of the Rural Telecommunications Group ("RTG"), filed Sept. 25, 1996, at 6.

<sup>15/</sup> Comments of GTE Service Corporation ("GTE"), filed Sept. 25, 1996, at 5.

<sup>16/</sup> Further Notice at ¶ 144. As BANM indicates, this issue was previously addressed during the comment period on the Ad Hoc Alliance's Petition for Rulemaking and uniformly opposed by every commenter that addressed it. Comments of BANM at 5-6.

common air interfaces between carriers that may make it impossible for one carrier to process another carrier's 911 call.<sup>17/</sup> The Ad Hoc Alliance's supporting documentation for its complex new modified proposal, which attempts to address concerns about incompatible air interfaces,<sup>18/</sup> is of limited value because it is only applicable to cellular carriers and analog technology and is clearly inconsistent with the trend toward digital technology. Digital channels would be exceedingly difficult to scan for the strongest compatible signal, leading to time delays and undermining the very objective of this rulemaking. Moreover, the Ad Hoc Alliance proposal is based upon the faulty premises that the "strongest" signal is necessary to ensure adequate call quality and completion and that the strongest signal would enhance a PSAP's ability to locate a caller. Contrary to the Ad Hoc Alliance's suggestion, the closest cell site does not necessarily produce the strongest signal. Thus, locating a caller through cell site location would not be made easier by adoption of this proposal.

Finally, the Ad Hoc Alliance's assertion that only a "minor" adjustment to existing software is needed to accomplish its strongest signal objective is incorrect.<sup>19/</sup> In fact, accomplishing this proposal would require the retrofitting of all existing handsets --

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<sup>17/</sup> Comments of PCIA at 12. AT&T does not support any proposal to mandate a "single air interface" for all 911 calls. See, e.g., Comments of Associated RT at 7.

<sup>18/</sup> See, e.g., Comments of the Mobile and Personal Communications Division of the Telecommunications Industry Association, filed Sept. 25, 1996, at 12-16 (stating that developing a consumer radio that can scan and utilize the range of frequency bands utilized by wireless systems would be very expensive and there is no guarantee such a radio would be adaptable to future modulation techniques).

<sup>19/</sup> The Ad Hoc Alliance's proposed "solution" to air interface problems -- that all wireless handsets be equipped to operate over a separate, unlicensed, cordless phone 900 MHz spectrum -- would present enormous costs, both in handset design and infrastructure development. Moreover, this proposal assumes that the Commission would dedicate this spectrum to 911 users.

indisputably a major undertaking -- and the software adjustment itself would only be "minor" with regard to analog phones. There is insufficient basis in the record to conclude that wireless coverage patterns pose public safety concerns of such magnitude as to require these extremely costly software modifications.<sup>20/</sup> AT&T instead recommends that the Commission focus on call completion in both urban and rural areas.

**B. THE COMMISSION SHOULD NOT REQUIRE CARRIERS TO FORWARD CALLS THAT DO NOT TRANSMIT A CODE IDENTIFICATION**

AT&T reiterates its opposition to the proposed requirement that, where requested by PSAPs, covered carriers transmit 911 calls from wireless handsets that do not transmit a code identification.<sup>21/</sup> The requirement makes little sense, is contrary to the weight of evidence in the record, and will harm the implementation of E-911 services. AT&T's position is supported by other commenters, including 360° Communications, which argues that such a requirement "makes call back impossible. . . increases the number of fraudulent and prank calls. . . makes it difficult for carriers to protect themselves from liability . . . and creates a free rider problem, thereby increasing rates for legitimate users."<sup>22/</sup> The New Jersey Office of Emergency Telecommunications Services ("NJ OETS") opposes any

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<sup>20/</sup> See Comments of Ameritech at 9.

<sup>21/</sup> Further Notice at ¶ 149. See Petition for Reconsideration of AT&T Wireless Services, Inc., filed Sept. 3, 1996.

<sup>22/</sup> Comments of 360° Communications at 5-7. See also Comments of the Cellular Telecommunications Industry Association ("CTIA"), filed Sept. 25, 1996, at 7; Comments of Ameritech at 3-7; and Comments of Southwestern Bell Mobile Systems ("SBMS"), filed Sept. 25, 1996, at 3.

requirement that non-initialized wireless phones be programmed to allow access to 911 because of the serious problems that can result from fraudulent calls.<sup>23/</sup>

The Ad Hoc Alliance attempts to address the problem of lack of call back capability by mandating "follow-me-roaming."<sup>24/</sup> However, the supporting documentation for this proposal considers only the current two-carrier environment and entirely ignores the enormous costs and complexities that would arise as implementation is attempted in the upcoming six-carrier marketplace. Even in the current wireless market, moreover, the Ad Hoc Alliance grossly underestimates the amount of work and the financial resources that would have to be dedicated to implement its proposal.<sup>25/</sup>

Following the Commission's own reasoning, wireline carriers should also be required to connect 911 calls placed from telephones that have been disconnected.<sup>26/</sup> Such a requirement would not make sense in the wireline context and makes no sense for wireless calls either. Moreover, the Commission acknowledges that requiring all 911 calls to be forwarded -- even if the mobile handset lacks a code identification -- presents difficult

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<sup>23/</sup> Comments of NJ OETS at 2. See also Comments of APCO, NENA and NASNA at 6-7 (describing the problems created by calls from non-initialized phones).

<sup>24/</sup> Comments of the Ad Hoc Alliance at 9, Appendix E.

<sup>25/</sup> The Ad Hoc Alliance proposal also fails to address legitimate concerns about increased fraud and exposure to heightened liability.

<sup>26/</sup> Service disconnection may be attributable to a number of legitimate reasons, from consumer choice to repeated failure to pay a bill. As AT&T has already made clear, it makes no sense to analogize mobile handsets to "pay telephones" and impose on wireless subscribers the costs that are usually imposed on providers of pay phones. See Order at ¶ 37.



technical problems for service providers.<sup>27/</sup> In light of the concerns expressed in the record, the requirement is not "a reasonable response to a problem that the agency was charged with solving."<sup>28/</sup>

**V. WIRELESS CARRIERS SHOULD HAVE THE FLEXIBILITY TO PROVIDE TAILORED CONSUMER EDUCATION PROGRAMS**

AT&T is committed to supporting public information programs to educate consumers on the use of E-911 and it therefore urges the Commission to allow carriers the freedom to design and implement such programs. Because of their preexisting relationship with customers and their knowledge of wireless technology, carriers are plainly in the best position to determine how to accomplish consumer education. For this reason, AT&T does not support PCIA's suggestion that PSAPs, rather than carriers, be responsible for implementing consumer education programs.<sup>29/</sup> Delegation of education authority to PSAPs might interfere with the carrier/customer relationship and preclude carriers from developing their own tailored programs. In addition, while the Commission might wish to use program suggestions such as those set forth by CTIA as exemplary models, it should not issue specific mandates regarding E-911 education.<sup>30/</sup> Finally, no equipment labeling or packaging insert

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<sup>27/</sup> Id. at ¶ 38.

<sup>28/</sup> Schurz Communications, Inc. v. FCC, 982 F.2d 1043, 1049 (7th Cir. 1992) (Posner, J) (citing Bowen v. American Hosp. Ass'n, 476 U.S. 610, 626-27 (1986) (plurality opinion)).

<sup>29/</sup> See Comments of PCIA at 9-11.

<sup>30/</sup> See Comments of CTIA at Exhibits A and B.

requirements should be imposed, as these might not conform to local capabilities and this could confuse, rather than inform, end users.<sup>31/</sup>

### CONCLUSION

For the foregoing reasons, the Commission should not impose additional E-911 requirements on carriers beyond Phase II.

Respectfully submitted,

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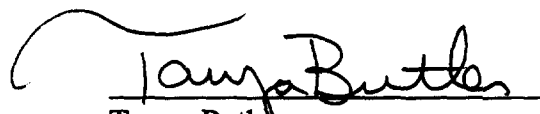
Dated: October 25, 1996

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<sup>31/</sup> See Comments of E.F. Johnson Company, filed Sept. 25, 1996, at 7 (stating that as system capabilities are upgraded over time, any information provided by equipment manufacturers will be of limited value).

**CERTIFICATE OF SERVICE**

I, Tanya Butler, hereby certify that on this 25th day of October 1996, I caused copies of the foregoing "Reply Comments of AT&T Wireless Services, Inc." to be sent by messenger to the following:

  
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